

PATENT APPLN. NO. 10/532,481
RESPONSE UNDER 37 C.F.R. §1.111

PATENT
NON-FINAL

IN THE CLAIMS:

1. (currently amended) A method of producing a three-layer fiber product having a grammage of 25 to 60 g/m², the method comprising fitting on both sides of a middle layer consisting of at least one fiber layer, a fiber layer which contains a filler and which forms a surface layer of the fiber product, characterized in that

- the layers are formed by using a multilayer forming process wherein slush of pulp is layered in the headbox of a paper machine in such a way that filler and additives are added to the pulp used in the surface layers of the three-layer product, after which the pulps are fed separated from each other to the headbox and then immediately combined before the lip of the headbox, where the jet of the pulp slush is directed to the wire, and

- the filler of the surface layers consists at least partially of cellulose or lignocellulose fibrils, on which light-scattering material particles are deposited, the maximum content of which is 85 % of the total weight of the filler;

- the amount of said filler in the surface layers is 5-50 % by weight of the fibers of the surface layer;

- the grammage of each surface layer is approximately 2 - 20 g/m²; and

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- the ratio of the total weight of the surface layers in relation to the weight of the middle layer is 35/65 to 65/35.

2. (canceled)

3. (previously presented) The method according claim 1, characterized by using a filler, which comprises cellulose or lignocellulose fibrils produced from vegetable fibers by refining and screening, and having an average thickness of less than 5 μm .

4. (previously presented) The method according to claim 1, characterized in that the light-scattering material particles are deposited on fibrils, which correspond to a fraction that passes a 50 mesh screen and/or whose average thickness is 0.1 - 10 μm with an average length of 10 - 1500 μm .

5. (previously presented) The method according to claim 1, characterized in that the light-scattering material particles are inorganic salts that can be formed from their source materials by precipitating in an aqueous medium.

6. (previously presented) The method according to claim 5,

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characterized in that the light scattering material particles are calcium carbonate, calcium oxalate, calcium sulphate, barium sulphate or mixtures thereof.

7. (previously presented) The method according to claim 1, characterized in that the proportion of inorganic salts of the weight of the filler is 75 - 85 % by weight.

8. (canceled)

9. (previously presented) The method according to claim 8, characterized in that the ratio of the total weight of the surface layers in relation to the weight of the middle layer is 20/80 to 80/20.

10. (previously presented) The method according to claim 1, characterized in that the middle layer comprises chemical cellulose pulp.

11. (previously presented) The method according to claim 1, characterized in that the surface layers comprise mechanical pulp.

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12. (canceled)

13. (currently amended) The method according to claim 1, characterized in that the middle layer and the surface layers each comprise a mixture of chemical cellulose pulp and mechanical pulp, and wherein a mechanical pulp, which is coarser than that used for forming one the surface layer layers, optionally is used for forming the other surface middle layer.

14. (previously presented) The method according to claim 1, characterized in that the ratio of the total weight of the surface layers in relation to the weight of the middle layer is 30/70 to 70/30.

15. (canceled)